

Cooperation by Treaty:  
The Role of Multilateral Powers

**Appendix**

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## A Treaty sample and data

	abbreviation	adopted	in force	treaty	US ratified	IATP sample	
	1	CUN	1945	1945	Charter of the United Nations	1945	—
	2	CPPCG	1948	1951	Convention on the Prevention and Punishment of the Crime of Genocide	1988	—
	3	C87	1948	1950	C87 Freedom of Association and Protection of the Right to Organise Convention	—	X
	4	GC	1949	1950	Geneva Conventions	1955	X
	5	C98	1949	1951	C98 Right to Organise and Collective Bargaining Convention	—	X
	6	C100	1951	1953	C100 Equal Remuneration Convention	—	X
	7	C105	1957	1959	C105 Abolition of Forced Labour Convention	1991	X
	8	C111	1958	1960	C111 Discrimination (Employment and Occupation) Convention	—	X
	9	VCDR	1961	1964	Vienna Convention on Diplomatic Relations	1972	—
	10	PTBT	1963	1963	Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water	1963	—
2	11	CERD	1965	1969	International Convention on the Elimination of All Forms of Racial Discrimination	1994	X
	12	ICCPR	1966	1976	International Covenant on Civil and Political Rights	1992	X
	13	ICESCR	1966	1976	International Covenant on Economic, Social and Cultural Rights	—	X
	14	OPICCP	1966	1976	Optional Protocol to the International Covenant on Civil and Political Rights	—	X
	15	NPT	1968	1970	Treaty on the Non-Proliferation of Nuclear Weapons	1970	X
	16	VCLT	1969	1980	Vienna Convention on the Law of Treaties	—	X

**Table 1:** Sample of 66 multilateral treaties.

*continued on next page*

	abbreviation	adopted	in force	treaty	US ratified	IATP sample	
	17	BWC	1972	1975	Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction	1975	X
	18	CITES	1973	1975	Convention on International Trade in Endangered Species of Wild Fauna and Flora	1974	—
	19	C138	1973	1976	C138 Minimum Age Convention	—	X
	20	APGC	1977	1978	Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Protocol I)	—	X
	21	APIIGC	1977	1978	Protocol Additional to the Geneva Conventions of 12 August 1949 and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II)	—	X
	22	CEDAW	1979	1981	Convention on the Elimination of All Forms of Discrimination against Women	—	X
3	23	CMS	1979	1983	Convention on the Conservation of Migratory Species of Wild Animals	—	—
	24	CCWCPIPIII	1980	1983	Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (with Protocols I, II and III)– with Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices as amended on 3 May 1996 (Protocol II as amended on 3 May 1996)	1995	—
	25	UNCLS	1982	1994	United Nations Convention on the Law of the Sea	—	X
	26	CAT	1984	1987	Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment	1994	X
	27	VCPOL	1985	1988	Vienna Convention for the Protection of the Ozone Layer	1986	—
	28	VCIO	1986		Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations	—	—
	29	MP	1987	1989	Montreal Protocol on Substances that Deplete the Ozone Layer	1988	X

**Table 1.** Sample of 66 multilateral treaties.

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	abbreviation	adopted	in force	treaty	US ratified	IATP sample
30	OPIIICCPR	1989	1991	Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the Abolition of the Death Penalty	—	X
31	CRC	1989	1990	Convention on the Rights of the Child	—	X
32	BC	1989	1992	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	—	X
33	ICRMW	1990	2003	International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families	—	X
34	UNFCCC	1992	1994	United Nations Framework Convention on Climate Change	1992	X
35	CWC	1992	1997	Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction	1997	X
36	CBD	1992	1993	Convention on Biological Diversity	—	X
37	UNCCD	1994	1996	United Nations Convention to Combat Desertification	2000	X
38	PIVCCWC	1995	1998	Additional Protocol to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol IV, entitled Protocol on Blinding Laser Weapons)	2009	—
39	CTBT	1996		Comprehensive Nuclear-Test-Ban Treaty	—	X
40	TBC	1997	2001	International Convention for the Suppression of Terrorist Bombings	2002	—
41	KPCC	1997	2005	Kyoto Protocol to the United Nations Framework Convention on Climate Change	—	X
42	APMC	1997	1999	Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their destruction	—	X
43	RC	1998	2004	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	—	X
44	RSICC	1998	2002	Rome Statute of the International Criminal Court	—	X

*Table 1. Sample of 66 multilateral treaties.*

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	abbreviation	adopted	in force	treaty	US ratified	IATP sample
45	C182	1999	2000	C182 Worst Forms of Child Labour Convention	1999	X
46	TFC	1999	2002	International Convention for the Suppression of the Financing of Terrorism	2002	X
47	OPCEDAW	1999	2000	Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women	—	X
48	PBC	1999		Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal	—	—
49	OPCRC	2000	2002	Optional Protocol to the Convention on the Rights of the Child on the Involvement of Children in Armed Conflict	2002	X
50	OPIICRC	2000	2002	Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography	2002	X
51	UNCTOC	2000	2003	United Nations Convention against Transnational Organized Crime	2005	—
52	PIUNCTOC	2000	2003	Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime	2005	—
53	PIIUNCTOC	2000	2004	Protocol against the Smuggling of Migrants by Land, Sea and Air, supplementing the United Nations Convention against Transnational Organized Crime	2005	—
54	CPCBD	2000	2003	Cartagena Protocol on Biosafety to the Convention on Biological Diversity	—	X
55	SC	2001	2004	Stockholm Convention on Persistent Organic Pollutants	—	X
56	PGRT	2001	2004	International Treaty on Plant Genetic Resources for Food and Agriculture	—	X
57	PIIUNCTOC	2001	2005	Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, supplementing the United Nations Convention against Transnational Organized Crime	—	—

**Table 1.** Sample of 66 multilateral treaties.

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	abbreviation	adopted	in force	treaty	US ratified	IATP sample
58	OPCAT	2002	2006	Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment	—	—
59	UNCC	2003	2005	United Nations Convention against Corruption	2006	—
60	PVCCWC	2003	2006	Protocol on Explosive Remnants of War to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol V)	2009	—
61	NTC	2005	2007	International Convention for the Suppression of Acts of Nuclear Terrorism	—	—
62	CRPD	2006	2008	Convention on the Rights of Persons with Disabilities	—	—
63	OPCRPD	2006	2008	Optional Protocol to the Convention on the Rights of Persons with Disabilities	—	—
64	CAED	2006	2010	International Convention for the Protection of All Persons from Enforced Disappearance	—	—
65	OPICESCR	2008		Optional Protocol to the International Covenant on Economic, Social and Cultural Rights	—	—
66	CCM	2008	2010	Convention on Cluster Munitions	—	—

**Table 1.** *Sample of 66 multilateral treaties.*

Notes: We made the following modifications to the IATP database of 43 treaties: 1) We excluded the International Labour Office Forced Labour Convention C29 (1930), because it was adopted before our period of analysis, and the Treaty on the Limitation of Anti-Ballistic Missile Systems which is not a multilateral agreement but a bilateral treaty between the US and the former Soviet Union. 2) We updated the IATP database to include post-2005 treaties with five subsequent core human rights instruments (the 2006 Optional Protocol to the Convention against Torture, the 2006 International Convention for the Protection of All Persons from Enforced Disappearance, the 2006 Convention on the Rights of Persons with Disabilities and its 2006 Optional Protocol, and the 2008 Optional Protocol to the International Covenant on Economic, Social and Cultural Rights) and one security treaty: the 2008 Convention on Cluster Munitions. 3) We added the 1948 Genocide Convention to the core human rights treaties, three rule-of-law treaties (1945 UN Charter; 1961 Vienna Convention on Diplomatic Relations, and the 1986 Vienna Convention on the Law of Treaties between States and International Organizations (IOs) or between IOs), four environmental treaties (1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora, the 1979 Convention on the Conservation of Migratory Species of Wild Animals, the 1985 Vienna Convention of the Protection of Ozone Layer, and the 1999 Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal), six security treaties (the 1997 International Convention for the Suppression of Terrorist Bombing, the 2005 International Convention for the Suppression of Acts of Nuclear Terrorism, the 1963 Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water, and the 1980 Convention on Prohibition or Restriction on the Use of Certain Conventional Weapons and the five Protocols thereto), and finally we added five “new security” treaties (the 2000 Convention against Transnational Organized Crime with its three Protocols and the 2003 Convention Against Corruption).

Variable	Definition	Source
<i>military expenditure</i>	Total military budget in thousands of current year US\$.	Correlates of War Project 2005.
<i>military personnel</i>	Troops under the command of the national government (in thousands) ready for combat as of January 1 of the referent year.	Correlates of War Project 2005.
<i>energy consumption</i>	Primary energy consumption measured as the industrial capacity; sum of four categories of sources – coal, petroleum, electricity, and natural gas, converted into thousands of coal-ton equivalents.	Correlates of War Project 2005.
<i>total trade</i>	Sum of imports and exports in millions of current year US\$.	Gleditsch 2006.
<i>GDP per capita (log)</i>	<i>real GDP per capita</i> – Chain index in constant 1996 US\$.	Heston, Summers, and Aten 2006.
	<i>growth rate of GDP per capita</i> – Annual percentage, based on constant local currency.	World Bank 2007.
	<i>GDP per capita</i> – GDP in constant 2000 US\$ divided by midyear population.	World Bank 2007.
	<i>gdp deflator</i> – Ratio of GDP in current local currency to GDP in constant local currency.	World Bank 2007.
<i>government expenditure</i>	General government final consumption expenditure in current US\$ including all government current expenditures for purchases of goods and services (compensation of employees, expenditures on national defense and security), and excluding government military expenditures that are part of government capital formation.	World Bank 2007; and Banks 2006.
<i>literacy rate</i>	Percentage of people aged 15 years and above who can read and write a short, simple statement on their everyday life.	World Bank 2007; and Banks 2006.
<i>physicians</i>	Graduates of any facility or school of medicine who are working in the country in any medical field (practice, teaching, research) per 1,000 people.	World Bank 2007; and Banks 2006.
<i>total population (log)</i>	All residents regardless of legal status or citizenship – except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of a state of origin.	Heston, Summers, and Aten 2006; and World Bank 2007.
<i>adult population</i>	Percentage of the total population in the age group 15 to 64.	World Bank 2007.

**Table 2:** *Constituent variables of the POWER index.*

Notes: For *GDP per capita (log)* we used as a basis real GDP per capita from Penn World Table (PWT) 6.2 (Heston, Summers, and Aten 2006), and interpolated and extrapolated the data with estimates of GDP growth rate per capita from World Development Indicators (WDI) (World Bank 2007). If neither PWT 6.2 nor WDI data was available, we used GDP per capita, deflated by GDP deflator from WDI for the basis year of the PWT 6.2 estimates. To estimate *government expenditures*, *literacy rate* (% of adult population) and *physicians* (per 1,000 people), we used WDI data. If not available, we imputed estimates from the Cross-national Times-series Data Archive. Banks 2006. For the estimation of *total population (log)* we first used PWT 6.2 data, and then imputed WDI estimates.

	Min	Max	Mean	Std. Deviation	Observations
POWER	0.12	2.8	1.39	0.13	94604
GDP	2.178	15.49	8.65	2.43	103374
INDEPENDENCE	0.12	1	0.88	0.14	81502
DEPENDENCE	0	4.7	0.09	0.23	65927
<b>Controls</b>					
DEMOCRACY	-10	10	-0.27	7.20	94191
NEW DEMOCRACY	0	1	0.11	0.31	99332
STATE AGE	0	63	29.33	17.25	126701
EUROPE	0	1	0.10	0.30	126701
ISSUE AREA	1	4	2.48	0.89	126701
COLONIAL PAST	0	1	0.7	0.46	122981
RELIGION (MUSLIM)	0	1	0.24	0.43	121661
RRIS	0	0.5	0.06	0.03	126651
SIGNATURE	0	1	0.23	0.42	126701

**Table 3:** Descriptive statistics.

Variable	Definition
POWER	Power indicator transformed to state power position relative to the US; (original measure standardized around “0” with max. value at “1”); higher values indicate greater capabilities. <a href="#">Milewicz 2009</a> .
GDP	Log of GDP in current US dollars (millions). <a href="#">World Bank 2007</a> .
INDEPENDENCE	Independence from the dominant actor, measured as trade independence of a given state from the US in terms of the balance of trade shares: $\text{trade independence}_{i,US} = 1 - (\text{trade share}_{i,US} - \text{trade share}_{US,i})$ . Trade share for a given state $i$ is defined as $\text{trade share}_{i,US} = \frac{\text{imports}_{i,US} + \text{exports}_{i,US}}{\text{imports}_i + \text{exports}_i} = \frac{\text{trade}_{i,US}}{\text{trade}_i}$ ; and for the US as $\text{trade share}_{US,i} = \frac{\text{imports}_{US,i} + \text{exports}_{US,i}}{\text{imports}_{US} + \text{exports}_{US}} = \frac{\text{trade}_{US,i}}{\text{trade}_{US}}$ ; higher values indicate greater trade independence; based on <a href="#">Gleditsch 2006</a> .
DEPENDENCE	Trade dependence of a given state measured as a state’s trade with the US as a proportion of the state’s GDP; higher values indicate greater dependence and lower independence; based on <a href="#">Gleditsch 2006</a> and <a href="#">World Bank 2007</a> .
DEMOCRACY	(Revised Combined) polity2 score (Polity IV Index); higher values indicate more democracy. <a href="#">Marshall and Jaggers 2007</a> .
NEW DEMOCRACY	Binary time-invariant measure for whether a state is a “new democracy” or not; based on <a href="#">Marshall and Jaggers 2007</a> ; states with averaged polity values of less than 1 in the period 1970–1988, and values greater than or equal to 5 post 1999 are coded as new democracies. <a href="#">Milewicz and Elsig 2014</a> .
STATE AGE	Years of existence post-1945, based on state sovereignty or state formation; based on <a href="#">Central Intelligence Agency 2008</a> , and cross-checked with the <a href="#">Correlates of War Project 2008</a> .
EUROPE	Binary time-invariant measure coding whether a state is located in Western Europe; based on <a href="#">Teorell and Hadenius 2005</a> .
HUMAN & LABOR RIGHTS, SECURITY, ENVIRONMENT	Issue area of the treaty coded as a time-invariant categorical variable with RULE OF LAW as reference category.
COLONIAL PAST	Binary time-invariant variable measuring whether a state has been colonized since 1700 ; based on <a href="#">Teorell and Hadenius 2005</a> .
RELIGION (MUSLIM)	Binary time-invariant variable measuring whether the majority of a state’s population is of Muslim or other denomination; based on <a href="#">La Porta, López-de Silanes, Shleifer et al. 1999</a> .
RRIS	Regional Ratification Intensity Score giving the ratio of actual ratifications to possible ratifications for all states in a given year and a given region; based on <a href="#">Correlates Of War Project 2003</a> ; lagged by one year; higher values indicate higher ratification intensity.
SIGNATURE	Binary variable measuring whether a state has signed a treaty.

**Table 4:** Explanatory variables.

## B Robustness checks

The statistical analysis was computed with [R Development Core Team 2014](#), survival R package version 2.37-4 ([Therneau 2015](#)). To assess the robustness and general validity of our results, we conducted additional tests. First, we double-checked our results on a simpler data structure that accounts only for the presence of right-censored data but not for left-truncated observations. This modification allows for time to ratification to vary across countries, but does not take account of the historical sequence of treaties. While it is less appropriate for our data, it is a standard approach. The results based on the data structure adjusted only for right-censoring lead to almost identical results. In particular, the effect for the interaction terms is similar to those presented. The coefficient estimates are likewise robust and statistically significant.

Second, to rule out the possibility that other factors might drive the results, we conducted additional tests for alternative explanations. We examined the effect of COLONIAL PAST<sup>1</sup> on support for ratification because of the persistence of the former colonial legal order. Since states with Western/secular values might be more inclined to participate in treaty making, we tested for whether the majority of a state's population is Muslim<sup>2</sup> expecting a negative link between RELIGION (MUSLIM) and the likelihood of ratification. We also controlled for the geographic diffusion of international norms<sup>3</sup> using a regional ratification intensity score (RRIS). We expected states sharing the same geographic region to display similar ratification patterns. Finally, as a state's ratification can be positively contingent upon its previous treaty-related actions, we controlled in our models for SIGNATURE expecting positive relationship. While these alternative controls had

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<sup>1</sup>[Teorell and Hadenius 2005](#).

<sup>2</sup>[La Porta, López-de Silanes, Shleifer et al. 1999](#).

<sup>3</sup>[Finnemore 1996](#).

the expected effect or no effect, their inclusion did not greatly affect the interaction term. Results based on the subsample of US non-ratified treaties are presented in [Table 5](#).

	<b>Model A1</b>	<b>Model A2</b>	<b>Model A3</b>
	exp(coef)	exp(coef)	exp(coef)
	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )
POWER	0.05 (0.004**)	0.1 (0.024*)	0.12 (0.05)
INDEPENDENCE	0.01 (0.003**)	0.01 (0.009**)	0.02 (0.02*)
POWER*INDEPENDENCE	<b>47.26</b> <b>(0.001**)</b>	<b>25.06</b> <b>(0.005**)</b>	<b>22.87</b> <b>(0.008**)</b>
<b>Controls</b>			
DEMOCRACY	1.04 (0.000***)	1.04 (0.000***)	1.04 (0.000***)
STATE AGE	0.99 (0.000***)	0.99 (0.001***)	0.98 (0.000***)
HUMAN & LABOR RIGHTS (ref.: RULE OF LAW)	2.41 (0.000***)	2.43 (0.000***)	2.54 (0.000***)
SECURITY (ref.: RULE OF LAW)	6.08 (0.000***)	6.04 (0.000***)	3.04 (0.000***)
ENVIRONMENT (ref.: RULE OF LAW)	2.66 (0.000***)	2.61 (0.000***)	2.12 (0.000***)
COLONIAL PAST	0.81 (0.057)		
RELIGION (MUSLIM)	0.89 (0.33)		
RRIS		2251.0 (0.000***)	
SIGNATURE			3.09 (0.000***)
LRT ( <i>p</i> )	513.3 (0)	602.7 (0)	943.5 (0)
Wald test ( <i>p</i> )	292.3 (0)	345.5 (0)	496 (0)
Robust (score) logrank test ( <i>p</i> )	97.98 (0)	103.8 (0)	117.8 (0)
No. Observations	38490	38490	38490
No. Events	2123	2123	2123
No. States	152	152	152
Period	1949–2000	1949–2000	1949–2000

**Table 5:** Additional models based on subsample of US non-ratified treaties.

Notes: Each cell entry [exp(coef)] is the exponential of the coefficient which is the hazard ratio (HR). The likelihood ratio test assumes independence of observations within a cluster (country); the Wald and robust score tests do not. \*\*\* $p|z| = < .001$ , \*\* $p|z| = < .01$ , \* $p|z| = < .05$ .

We also checked whether particular groupings of countries might be artificially driving the results. In particular, because European states are well-known supporters of multilateralism, we tested for the “European” effect by controlling for whether a state is located in EUROPE<sup>4</sup> (Table 6, model A4; based on subsample of US non-ratified treaties) and by excluding European states from the data sample. Our results indicate that their support is not just because these states are “European” – as in “normative Europe” – but also because of their position as powerful and independent states. Similarly, controlling for (or excluding) alternative groupings of countries such as G8 and G20 did not change our major findings. Finally, we also found a positive effect of being a NEW DEMOCRACY on treaty ratification but, again, this did not change the central findings (Table 6, model A5).

Third, we refitted our models based on alternative measures of INDEPENDENCE and POWER. Because the INDEPENDENCE measure (as used in models shown in ??) captures relative rather than absolute trade importance, we constructed an alternative variable of DEPENDENCE (measured in terms of a state’s trade with the US as a proportion of its GDP).<sup>5</sup> While the effect of DEPENDENCE is the opposite of INDEPENDENCE (as expected), the general finding of the model is confirmed (see Table 6, models A6 and A7). For alternative measures of POWER, we used the separate dimensions (economic, military and human capital) of our index, the Composite Index of National Capability (CINC)<sup>6</sup> and GDP.<sup>7</sup> While military capabilities – measured as CINC or the military component of our POWER index<sup>8</sup>

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<sup>4</sup>EUROPE is correlated with POWER at 0.53.

<sup>5</sup>The negative correlation between INDEPENDENCE and DEPENDENCE is relatively strong at -0.69. Both variables correlate weakly with POWER (INDEPENDENCE: 0.066 and DEPENDENCE: 0.041).

<sup>6</sup>Correlates of War Project 2005.

<sup>7</sup>World Bank 2007. The correlation between POWER and CINC is 0.351, and between POWER and GDP is 0.737.

<sup>8</sup>CINC and the military dimension of our POWER index are correlated at 0.909.

– played no statistically significant role in our models, results based on GDP (see [Table 6](#), model A7) and the other two dimensions of the POWER index – economic power and social and human capital – were important but did not change the results substantively. This not only confirms that military capabilities were not having undue influence, it suggests a need for caution in using military measures to capture influence and to consider power in more comprehensive terms in general international issues.

Fourth, we also excluded observations for Canada and Mexico which might have been consequential outliers that are powerful but dependent. The results did not change.

Fifth, we confirmed our results for the key POWER\*INDEPENDENCE combination based on the original smaller IATP sample and on several different subsets of our data set excluding individual issue areas from the full sample. In addition, we refitted model 5 from ?? (for treaties that the US ratified quickly in the year of treaty adoption or the year after) with a slightly extended sample of treaties. Economic treaties are not included in the IATP sample, so we added four key post-war economic agreements to our sample: the Articles of Agreement of the International Monetary Fund (1945), the International Bank for Reconstruction and Development Articles of Agreement (1945), the GATT (1948)<sup>9</sup> and the Agreement Establishing the WTO (1995). The first three treaties were adopted at the peak of American dominance and the WTO Agreement was also adopted under a strong show of US power through the “single undertaking”.<sup>10</sup> The extended model 5 both confirmed the results of initial model 5 and improved them by yielding statistically significant effects for the interaction term and independence.<sup>11</sup>

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<sup>9</sup>When working with the extended treaty sample, we allowed for the right-censorship of the GATT which expired in 1994.

<sup>10</sup>[Steinberg 2002](#).

<sup>11</sup>A reviewer suggested that we test our results against the [Bernauer, Kalbhenn, Koubi et al.](#)

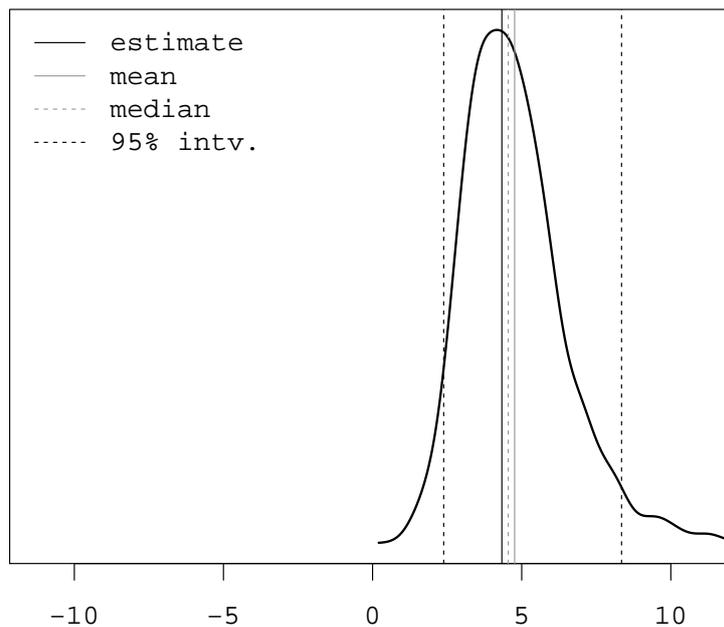
	<b>Model A4</b>	<b>Model A5</b>	<b>Model A6</b>	<b>Model A7</b>
	exp(coef)	exp(coef)	exp(coef)	exp(coef)
	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )	( <i>p</i> )
POWER	0.07 (0.022*)	0.06 (0.009**)	2.22 (0.072)	
INDEPENDENCE	0.01 (0.019*)	0.01 (0.003**)		
DEPENDENCE			147500.0 (0.013*)	11.22 (0.058)
GDP				1.07 (0.011*)
POWER*INDEPENDENCE	<b>26.22</b> <b>(0.021*)</b>	<b>56.81</b> <b>(0.001***)</b>		
POWER*DEPENDENCE			<b>0.0001</b> <b>(0.009*)</b>	
GDP*DEPENDENCE				<b>0.71</b> <b>(0.02*)</b>
<b>Controls</b>				
DEMOCRACY	1.04 (0.000***)	1.04 (0.000***)	1.04 (0.000***)	1.04 (0.000***)
STATE AGE	0.98 (0.000***)	0.99 (0.001***)	0.99 (0.007**)	0.99 (0.002**)
HUMAN & LABOR RIGHTS (ref.: RULE OF LAW)	2.43 (0.000***)	2.43 (0.000***)	2.52 (0.000***)	2.48 (0.000***)
SECURITY (ref.: RULE OF LAW)	6.13 (0.000***)	6.14 (0.000***)	6.43 (0.000***)	6.24 (0.000***)
ENVIRONMENT (ref.: RULE OF LAW)	2.69 (0.000***)	2.7 (0.000***)	2.94 (0.000***)	2.9 (0.000***)
EUROPE	1.68 (0.000***)			
NEW DEMOCRACY		1.29 (0.048*)		
LRT ( <i>p</i> )	529.2 (0)	508.6 (0)	403.9 (0)	404.1 (0)
Wald test ( <i>p</i> )	294.8 (0)	295.2 (0)	288.8 (0)	288.5 (0)
Robust (score) logrank test ( <i>p</i> )	97.85 (0)	98 (0)	96.03 (0)	96.06 (0)
No. Observations	38490	38490	32957	33355
No. Events	2123	2123	1864	1890
No. States	152	152	151	153
Period	1949–2000	1949–2000	1960–2000	1960–2000

**Table 6:** Additional models based on subsample of US non-ratified treaties.

Notes: Each cell entry [exp(coef)] is the exponential of the coefficient which is the hazard ratio (HR). The likelihood ratio test assumes independence of observations within a cluster (country); the Wald and robust score tests do not. \*\*\* $p|z| < .001$ , \*\* $p|z| < .01$ , \* $p|z| < .05$ .

Finally, to assess the robustness of our results with regard to particular treaties, [\(2010\)](#) data set covering 255 environmental treaties. We investigated this possibility carefully and

we ran a bootstrap simulation for model 3 from ???. Sampling randomly with replacement on treaties in 199 iterations, we resampled the original data. The results of the simulation for POWER\*INDEPENDENCE are presented in Figure 1, and confirm that the interaction has a significant and consistent effect on the likelihood of ratification (zero is outside the confidence bounds).



**Figure 1:** *Bootstrap simulation result for POWER\*INDEPENDENCE.*

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our reasons for not using this sample are instructive. Many treaties in the [Bernauer, Kalbhenn, Koubi et al.](#) data set do not meet our selection criteria (i.e., some do not provide for universal participation but are plurilateral; others have a regional rather than global focus; and some do not substantially change the body of international law but are primarily amendments to existing practice). More importantly, a comparative analysis of the two data sets shows that treaties in the [Bernauer, Kalbhenn, Koubi et al.](#) data set are substantially less contentious than are the treaties in our data set, as reflected in a dramatically shorter average time to ratification. We nevertheless ran our model on this data set – the results tended in the same direction but were in general not significant on our variables. It is not surprising that multilateral power is less important for less contentious treaties. We do think this points towards new questions about different types of treaties, which we briefly raise in the conclusion of our paper.

## C Control variables

The controls included in models presented in ?? behave largely as expected. DEMOCRACIES have a significant tendency to be strong multilateralists: A fully democratic state is between 2.22 (model 6) and 3.14 (model 5) times more likely to ratify a multilateral treaty than a highly autocratic regime.<sup>12</sup> Improvement on the polity scale by one unit increases a state's ratification likelihood between 4% (models 3 and 6) and 6% (model 5).

STATE AGE has a highly significant negative effect on ratification (with the exception of model 5 based on the subsample of US ratified treaties, where it is no longer significant). This confirms previous findings that newer states seek to establish their good citizenship in the international community by means of speedy treaty ratifications.

Results for the issue area variables are not consistent across models and differ according to whether the US has or has not ratified. Estimations based on the full sample and on the subsample of treaties that the US has not ratified (models 2 and 3) show all issue areas affecting the likelihood of ratification positively as compared to the RULE OF LAW baseline (although the effect for HUMAN & LABOR RIGHTS is statistically insignificant). Following model 2, ENVIRONMENT seems to matter most: The ratification of an environmental treaty is 90% more likely than the ratification of a HUMAN & LABOR RIGHTS treaty, and 28% more likely than that of a SECURITY treaty.<sup>13</sup> When the US does not ratify, SECURITY issues produce the strongest effects. Then the propensity of ratifying a security treaty is 2.27 times higher than for an ENVIRONMENTAL treaty and 2.55 times higher than a HUMAN & LABOR RIGHTS treaty. When the US ratifies, issue areas matter less and are less stable. SECURITY issues yield the most consistent results. When

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<sup>12</sup>Calculated as  $\exp(\text{coef}_{\text{DEMOCRACY}} * 10) / \exp(\text{coef}_{\text{DEMOCRACY}} * (-10))$ .

<sup>13</sup>Calculates as  $\exp(\text{coef}_{\text{ENVIRONMENT}}) / \exp(\text{coef}_{\text{HUMAN \& LABOR RIGHTS}})$ .

the US ratifies a security treaty, it slows the pace at which the other states ratify by 47% (and by 77% when US ratifies immediately and by 41% when US ratifies later). Similarly, the likelihood of ratifying a HUMAN & LABOR RIGHTS treaty decreases by 51% when the US does not participate (50% when the US joins later).

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